

## **COMPATIBILITY DETERMINATION**

*(March 2014)*

**Use:** Feral Pig Hunting

**Refuge Name:** Sacramento River National Wildlife Refuge, located in Tehama, Butte, Glenn and Colusa counties, California.

**Establishing and Acquisition Authority(ies):** Sacramento River National Wildlife Refuge (SRNWR) was established in 1989. Approximately 11,000 acres of the approved 18,000 acres have been acquired. Legal authorities used for establishment of the Refuge include: the Endangered Species Act of 1973 as amended (16 U.S.C. 1531-1543; 87 Statute 884), the Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b) and the Fish and Wildlife Act of 1956 (16 U.S.C. 742).

**Refuge Purpose(s):** Sacramento River Refuge purposes include:

“... to conserve (A) fish or wildlife which are listed as endangered species or threatened species .... or (B) plants ...” 16 U.S.C. Sec. 1534 (Endangered Species Act of 1973)

".. the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ..."16 U.S.C. 3901(b) (Emergency Wetlands Resources Act of 1986)

“... for the development, advancement, management, conservation, and protection of fish and wildlife resources ...” 16 U.S.C. 742f (a) (4) “... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ...” 16 U.S.C. Sec. 742f (b) (1) (Fish and Wildlife Act of 1956)

**National Wildlife Refuge System Mission:** “To administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.” (National Wildlife Refuge System Administration Act of 1966, as amended [16 U.S.C. 668dd-ee]).

**Description of Use:** Recently, feral pig populations have invaded riparian habitat along the Sacramento River in Butte, Glenn and Tehama counties. Feral pigs were not present along the Sacramento River when the SRNWR opened to public use including hunting in 2005 when the SRNWR Comprehensive Conservation Plan (CCP) was adopted. Therefore, feral pigs were not previously considered when the

Service identified “authorized” species in the Hunting Plan (USFWS 2005, amended 2014).

Feral pigs have been documented as agricultural pests throughout the United States and are responsible for an estimated \$800 million in damage each year to agricultural commodities (Pimental et al. 2000). In addition, feral pigs have been shown to restrict forest growth, reduce and/or remove understory vegetation and destabilizing soils, causing increased erosion and compaction, while simultaneously decreasing stream quality (Bratton 1975, Singer 1981). Rooting and grubbing activities have also been shown to facilitate the invasion of noxious weeds and other non-native vegetation, thereby reducing site diversity and the distribution of native species (Singer 1976). Rooting has also been shown to significantly reduce already low levels of regeneration by oaks in California (Sweitzer and Van Vuren 2002). Local damage inflicted by feral pigs includes depredation to adjacent agricultural crops (row crop, dry land cereal grains and commercial nuts) as well as infrastructure including irrigation systems and roads. On SRNWR lands, feral hogs have “rooted up” native grasslands and other associated habitats resulting in the spread of invasive weeds and increasing erosion into nearby waterways. Feral pigs have also damaged walking trails and roadways on the SRNWR open to the public. California Department of Fish & Wildlife (CDFW) began issuing depredation permits to landowners adjacent to the SRNWR to help reduce impacts on commercial agricultural operations in 2011. According to CDFW biologists, the state has issued approximately 170 depredation permits to private landowners in Tehama, Butte, and Glenn counties. In response to agricultural depredation/damage complaints between 2012 and 2013, the USDA trapper for Butte County has dispatched 171 wild pigs on river bottom lands adjacent to the Refuge in Butte County alone. Currently, the SRNWR is viewed by adjacent agricultural interests as “harboring” feral pigs from control efforts resulting in a less than popular view by neighboring landowners and sportsman alike.

In an effort to work with adjacent landowners, animal control agencies and the CDFW, the SRNWR is proposing to add feral pigs to the list of authorized species that are open to hunting on the SRNWR (Comprehensive Conservation Plan Strategies 3.2.2, *implement improvements and revisions to resolve issues with adjacent landowners*; 1.9.1, *exotic, invasive species control*; 2.1.19, *cooperative management with CDFW*). In an effort to continue to provide compatible public use to a variety of user groups while working with our neighbors and local wildlife agencies to reduce the spread of a destructive invasive vertebrate, the SRNWR proposes a limited season (concurrent with existing hunt seasons) and a restriction on the use of dogs (not allowed) for feral pig hunting.

Hunting is identified in the Refuge Improvement Act as a priority use for refuges when it is compatible with the refuge purposes and mission of the Refuge System. As a result the SRNWR is proposing to add feral pig hunting to the current

allowable species list which consists of dove, waterfowl, coot, common moorhen, pheasant, quail, snipe, turkey and deer hunting. There are limited opportunities to hunt this species on other public lands along the Sacramento River between Red Bluff and Colusa. Maps and unit descriptions where hunting will be allowed are illustrated in the CCP (USFWS 2005), the Hunting Plan (USFWS 2005, amended 2014), the SRNWR Environmental Assessment Supplemental Cumulative Impacts Analysis of the Hunt Program (USFWS 2007), and SRNWR brochures and web site. The hunting program has to be developed to provide high quality, safe, and cost-effective hunting opportunities, and will be carried out consistent with State regulations, see Refuge Manual 8 RM 6, Hunting. The Hunting Plan (updated 2013) was developed to provide safe hunting opportunities, while minimizing conflicts with other priority wildlife-dependent recreational uses. The SRNWR hunting program will comply with the Code of Federal Regulations Title 50, 32.1 and managed in accordance with Refuge Manual 8 RM 6, Hunting.

Hunting will be permitted in accordance with refuge specific, State and Federal regulations and seasons (Table 1 gives example of annual state hunt seasons for areas within the SRNWR) to ensure that it will not interfere with the conservation of fish and wildlife and their habitats. Therefore, the sport hunting of feral pigs on the SRNWR is in compliance with State regulations and seasons, the National Wildlife Refuge System Administration Act of 1966 as amended by the National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd-ee), and the Refuge Recreation Act of 1962 (16 U.S.C. 460k).

The SRNWR currently consists 10,304 acres of agricultural, wetland, grassland, and riparian habitats (Table 1, Chapter 1, CCP). Initially 3,356 acres were opened in 2005. Since 2005 an additional 1,906 acres to total 5,293 acres (52 percent) open to hunting (Figure 28, Chapter 5, CCP). An additional 576 acres will be open within 2 years following the completion of riparian restoration efforts on the La Barranta and Codora Units which will result in a total of 5869 acres (57 percent) open to hunting and other wildlife-dependent recreation. The 5,869 acres open to hunting is also open to other recreational uses including fishing, wildlife observation and photography, environmental education, and interpretation.

Most SRNWR lands are accessible only by boat (motorized and non-motorized). There are no developed boat ramps or related facilities on the Refuge. There are existing boat ramps with related facilities that provide public access along the portion of the river where SRNWR lands are located (Appendix N of CCP (USFWS 2005)). Units that have a parking area will be gated to allow only pedestrian traffic on refuge lands (bicycles and motorized vehicles will not be allowed during the hunting season). Limited camping on gravel bars below the ordinary high water mark up to seven days is allowed. Camping on SRNWR land, other than gravel bars, is prohibited. For additional information, refer to the Camping and Recreational Boating Compatibility Determination, (USFWS 2005). Camping areas

in the vicinity of the SRNWR are also identified in Appendix N of the CCP (USFWS 2005).

Method of take: Weapons or ammunition for take of feral pigs include shotgun, firing single shotgun slugs, and archery only. No rifles or pistols may be used or possessed.

There will not be any hunter check stations or direct method to regulate hunter quotas on each unit. It is predicted that there will be minimal hunting (1,500 annual visits) due to the limited vehicle access, dense cover, and seasonal boat access. Hunters must report take of feral pigs according to State regulations. Field checks by federal wildlife officers will be planned, conducted, and coordinated with staff and other agencies to maintain compliance with regulations and assess species and number harvested.

Table 1. California Hunting Seasons (2013-2014).

<b>Species</b>	<b>Dates</b>
Dove	September 1-15 and from second Saturday in November for 45 days
Feral Pigs	*September 15 through March 15th
Waterfowl <sup>1</sup> - Ducks	Third Saturday in October for 33 days and from third Friday in November for 66 days
Waterfowl <sup>1</sup> - Geese	First Saturday in November extending 86 days
American Coot and Common Moorhen	Concurrent with duck season (and during split, if it occurs)
Pheasants	Second Saturday in November extending for 44 days
Quail – General	Third Saturday in October extending through the last Sunday in January
Quail – Archery	Third Saturday in August extending through the last Sunday in September
Snipe	Third Saturday in October extending for 107 days
Turkey – Fall	Second Saturday in November extending for 16 consecutive days
Turkey – Spring	Last Saturday in March, extending for 37 consecutive days
Deer – Archery (Zone C4, all units except Drumheller, Drumheller North & Afton Units)	Last Saturday in August extending for 16 consecutive days

Deer – General (Zone C4, all units except Drumheller, Drumheller North & Afton Units)	Third Saturday in September extending for 16 consecutive days
Deer – Archery (Zone D3, Drumheller, Drumheller North & Afton Units)	Third Saturday in August extending for 23 consecutive days
Deer –General (Zone D3, Drumheller, Drumheller North & Afton Units)	Fourth Saturday in September extending for 37 consecutive days
Deer – G1 Late Season (Zone C4 all units except Drumheller, Drumheller North & Afton Units)	Fourth Saturday in October extending for 9 consecutive days

\* Feral Pig hunting season is more restrictive on the SRNWR than State regulations which allow feral pig hunting year round.

Public use signs depicting allowable uses, river mile and unit name will be placed above the approximate ordinary high water mark and at parking areas.

Landward boundaries are closed to discourage trespass through adjacent private lands. Random, weekly hunter field checks will be conducted by federal wildlife enforcement officers to assess number of hunters, type and number of harvested species, enforce game laws, refuge regulations, and boundaries. The monitoring information will be summarized and provided to the refuge manager to be used to make management decisions under the adaptive management process. Coordinated law enforcement patrols by federal wildlife officers, special agents, state game wardens, park rangers, and deputy sheriffs will take place periodically. Law enforcement support would be provided by California Department of Fish and Wildlife wardens and California Department of Parks and Recreation rangers under a memorandum of understanding with the Refuge (USFWS et al 2001).

**Availability of Resources:** The following funding/annual costs (based on FY 2013 costs) would be required to administer and manage hunting activities as described above:

	One-Time Costs	Annual Costs
Outreach, Education, Monitoring	\$500	\$100
Signs, brochures, and maintenance	\$1000	\$500
<b>TOTAL</b>	<b>\$1,500</b>	<b>\$600</b>

Relatively little additional funds would be required to operate and maintain the feral pig hunting hunt program. The SRNWR currently funds the hunt program through annual operating dollars. Other sources will be sought through strengthened partnerships, grants, and additional refuge operations funding to support a safe and quality program as described above. In the future, user fees may be considered.

Funding for the maintenance of parking areas and trails mentioned in the description of use are included under the Compatibility Determination for Wildlife Observation, Photography and Interpretation (USFWS 2005).

### **Anticipated Impacts of Use:**

Hunting is a highly regulated activity, and generally takes place at specific times and seasons (dawn and dusk, fall and winter) when the game animal is more active, and other wildlife-dependent activities (e.g., wildlife observation, environmental education and interpretation) are less common, reducing the magnitude of disturbance to refuge wildlife. Managed and regulated hunting will not reduce species populations to levels where other wildlife-dependent uses will be affected.

Hunting is an appropriate wildlife management tool that can be used to manage wildlife populations. Some wildlife disturbance occurs during the hunting seasons. Proper zoning, regulations, and SRNWR seasons will be designated to minimize any negative impacts to wildlife populations using the SRNWR. Due to the difficulty of accessing and traversing the SRNWR units (primarily boat access from the river, areas of impenetrable “jungle” habitat, e.g., blackberries, poison oak, etc., which limits hunter access), we anticipate that hunter numbers will be limited. The primary species that will be hunted above the ordinary high water mark will be nonnative wild turkey, feral pigs and deer. Harvesting these three species, or any other hunted species, would not result in a substantial decrease in biological diversity on the SRNWR.

The minor proposed addition of feral pigs to the list of authorized species in hunt program at SRNWR will not be intermittent in order to provide consistent management with the existing program on adjacent CDFW lands and waters, preventing confusion among hunters on the river. Boating activity associated with hunting during the fall and winter can alter distribution, reduce use of particular habitats or entire areas by waterfowl and other birds, alter feeding behavior and nutritional status, and cause premature departure from areas (Knight and Cole 1995). Additional impacts from hunting activity may include conflicts with individuals participating in wildlife-dependent priority public uses, such as canoers, kayakers, and other wildlife observers.

The impacts addressed here are discussed in detail in Environmental Assessment (Appendix A, Chapter 4) for the CCP (USFWS 2005) and the SRNWR Environmental Assessment Supplemental Cumulative Impacts Analysis of the Hunt Program (USFWS 2007) which is incorporated by reference. Biological conflicts will be minimized by following proper zoning and regulations. SRNWR seasons will be designated to minimize negative impacts to wildlife. Difficult access to most units that allow hunting, which is primarily by boat, may limit number of hunters and visits. Sanctuary units, totaling 24 percent of refuge lands, are distributed within separate reaches of the River, which provides areas needed by wildlife for resting, feeding, nesting, and fawning. Dense riparian forests provide additional sanctuary for wildlife species.

A Section 7 consultation with USFWS (2004) and NOAA-Fisheries (2004) concluded that the CCP (and Hunting Plan) is not likely to adversely affect any of the special status species/designated critical habitat occurring on the SRNWR including bald eagle, giant garter snake, winter-run Chinook salmon, spring-run Chinook salmon, Central Valley steelhead, Valley elderberry longhorn beetle, western yellow billed cuckoo, fall-run Chinook salmon, and late fall-run Chinook salmon.

Conflicts between hunting and other public uses and neighboring landowners will be minimized by the following:

- Provide 1,911 acres (19%) of the refuge for non-hunting activities (i.e. wildlife observation, photography, interpretation, environmental education and fishing activities).
- Landward boundaries are closed to discourage trespass from and onto adjacent private lands.
- Hunting will not be allowed on Refuge units that are small in area and close in proximity to urban areas and private dwellings.
- Hunting is not allowed within 50 feet of any landward boundaries adjacent to privately owned property. As per California Fish and Wildlife regulations, it is unlawful to hunt or discharge while hunting, any firearm or deadly weapon within 150 yards of any occupied dwelling house, residence, or other building or any barn or other outbuilding used in connection therewith. The 150-yard area is a “safety zone”.
- All Refuge units will be posted with boundary signs and public use information signs prior to opening to the public.
- Provide information about the Refuge hunting program by installing informational signs/kiosks, creating and distributing brochures, and utilizing the Refuge’s website ([www.fws.gov/refuge/sacramento\\_river](http://www.fws.gov/refuge/sacramento_river)).
- Place public use signs at vehicle access points and at the approximate ordinary high water mark on all Refuge units open to the public. The signs will depict the unit name, river mile, and public uses allowed/prohibited (Figures 26 & 27 of the CCP).
- On Refuge lands, excluding gravel bars, entry and departure is restricted to

two hours before legal sunrise to one and one half hours after sunset.

- Limited camping on gravel bars below the ordinary high water mark up to seven days is allowed. Camping on Refuge land, other than gravel bars, is prohibited.
- Allow pedestrian and boat traffic only.
- Provide coordinated law enforcement patrols by game wardens, park rangers, and federal wildlife officers to enforce state and federal regulations.

Wildlife populations on the Refuge are able to sustain hunting and support other wildlife-dependent priority uses. To manage the populations to support hunting, the Refuge adopts harvest regulations set by the State within Federal framework guidelines.

Possibly target species and other wildlife will compete for habitat. While each species occupies a unique niche, there is only a finite amount of space available to satisfy various habitat requirements of water, food, cover, breeding, roosting, and fawning areas. So, while individuals of a species compete for habitat within the species niche, most species occupy space to the exclusion of many other species. Target species (dove, waterfowl, coot, common moorhen, pheasant, quail, snipe, turkey deer, and feral pigs) generally do not prey on other species at unacceptable levels. Occasionally, in certain areas, deer browse of seedling valley oak is particularly heavy. In addition to the impacts on oak mast food resources and other vegetation, feral pigs prey on herptofauna, ground nesting birds, small mammals, and deer fawns (Bratton 1974).

By its very nature, hunting has very few positive effects on the target species while the activity is occurring. However, in our opinion, hunting has given many people a deeper appreciation of wildlife and a better understanding of the importance of conserving their habitat, which has ultimately contributed to the Refuge System mission. Furthermore, the negative economic and natural resource impacts of invasive feral pigs have been well documented throughout the world. Adding feral pigs to the list of authorized species open to hunting on the Sacramento River will help to achieve the objectives and goals identified in the CCP for the SRNWR (CCP Strategies 3.2.2, *implement improvements and revisions to resolve issues with adjacent landowners*; 1.9.1, *exotic, invasive species control*; 2.1.19, *cooperative management with CA DFW*).

Recreational hunting will remove individual animals, but does not negatively affect wildlife populations. To assure that populations are sustainable, California Fish and Game Commission in consultation with the CDFW annually review the population censuses to establish season lengths and harvest levels. Each year, the Refuge staff conducts habitat management reviews of each unit on the Complex to evaluate wildlife population levels, habitat conditions and public use activities. The



areas closed to various hunting activities do provide adequate sanctuaries for wildlife.

Based on the past 8 years of operating the Refuge hunt program, the Refuge Manager believes that there will be minimal conflicts between hunters and the other wildlife-dependent recreational uses. The uses differ seasonally (Figure 25, Chapter 5, CCP), are dispersed along the River, and most are not occurring on the same area at the same time. Currently, hunting occurs on and along the Sacramento River, outside of the Refuge, without many known conflicts.

**Anticipated Impacts of Uses on future lands within the approved boundary:** The following conditions must be met before allowing existing uses to occur on newly acquired lands: (1) There is no indirect, direct, or cumulative threat anticipated to human health or safety; (2) There is no indirect, direct, or cumulative threat anticipated to natural or cultural resources; (3) The use is consistent with management of existing Sacramento River Refuge lands and would contribute to achieving Refuge goals. In particular, existing Refuge regulations would not be compromised; (4) The newly acquired lands represent a meaningful unit within which to manage the activity; and (5) There are no anticipated conflicts with priority public uses.

**Public Review and Comment:** Public review and comments were solicited in conjunction with distribution of the Draft CCP/EA for the Sacramento River Refuge, released in July 2004 and the SRNWR Environmental Assessment Supplemental Cumulative Impacts Analysis of the Hunt Program in 2007. Few comments were received specific to the Compatibility Determinations. Comments received (including those regarding hunting) were addressed in the Response to Comments (Appendix R). No changes were made based on comments received. CDFW (2004b) has determined that fish and wildlife resources found along the Sacramento River are healthy and robust enough to support regulated hunting and fishing, complimenting the other activities available to the public in their enjoyment of their public resources.

**Determination:**

☐ Use is Not Compatible

☒ Use is Compatible with the Following Stipulations

**Stipulations necessary to ensure compatibility:**

- Refuge Specific Regulations

**A. Migratory Game Bird Hunting.** We allow hunting of goose, duck, coot, moorhen, dove, and snipe on designated areas of the refuge in accordance with State regulations subject to the following conditions:

1. Access to the hunt area on all units open to public hunting is by boat only, except on designated units, which are accessible by foot traffic or boat. We prohibit bicycles or other conveyances. Mobility impaired hunters should consult with the refuge manager for allowed conveyances. Waterfowl hunting is not allowed on the Mooney and Codora Units.
2. On the Codora Unit, hunting is not allowed except for junior hunting (16 years old or younger) is allowed on weekends only. Junior hunters must possess a valid junior hunting license and be accompanied by a non-hunting adult.
3. Possession of alcohol is prohibited.
4. We only allow shotgun hunting.
5. Firearms must be unloaded (*see* § 27.42(b) of the FR) before transporting them between parking areas and hunting areas. “Unloaded” means that no ammunition is in the chamber or magazine of the firearm.
6. You may possess only approved nontoxic shot while in the field (*see* § 32.2(k) of the FR).
7. We prohibit hunting within 50 feet (15 m) of any landward boundary adjacent to private property.
8. We prohibit hunting within 150 yards (45 m) of any occupied dwelling, house, residence, or other building or any barn or other outbuilding used in connection therewith.
9. We prohibit fires on the refuge, except we allow portable gas stoves on gravel bars (*see* § 27.95(a) of the FR).
10. We open the refuge for day-use access from 2 hours before legal sunrise until 1½ hour after legal sunset. We allow access during other hours on gravel bars only (*see* condition A8).
11. We require dogs to be kept on a leash, except for hunting dogs engaged in authorized hunting activities, and under the immediate control of a licensed hunter (*see* § 26.21(b) of the FR).
12. We prohibit permanent blinds. You must remove all personal property, including decoys and boats, by 1½ hour after legal sunset (*see* §§ 27.93 and 27.94 of the FR).
13. We prohibit cutting or removal of vegetation for blind construction or for making trails (*see* § 27.51 of the FR).
14. Commercial guiding is prohibited.

**B. Upland Game Hunting.** We allow hunting of pheasant, turkey, and quail on designated areas of the refuge in accordance with State regulations subject to the following conditions:

1. We only allow shotgun and archery hunting.
2. Conditions A1 through A3, and A5 through A14 apply.

**C. Big Game Hunting.** We allow hunting of black-tailed deer and feral pigs on designated areas of the refuge in accordance with State regulations subject to the following conditions:

1. Conditions A1 through A3, A5, A7 through A14, and B1
2. Feral pigs may be hunted September 15<sup>th</sup> through March 15<sup>th</sup>.
3. Dogs are prohibited while hunting feral pigs.
4. We prohibit construction or use of permanent blinds, platforms, ladders or screw-in foot pegs.
5. You must remove all personal property, including stands or hunting blinds from the refuge by 1½ hour after legal sunset (*see* §§ 27.93 and 27.94 of the FR).
6. Shotgun, firing single shotgun slugs, and archery hunting only. No rifles or pistols may be used or possessed on the refuge.

**E. Sport Fishing.** We allow sport fishing on designated areas of the refuge in accordance with State regulations subject to the following conditions:

1. Conditions A3, A9 through A14 apply.
2. On Packer Lake and Drumheller North, due to primitive access, we only allow boats up to 14 feet (4.2 m) and canoes. Electric motors only.

- All hunting activities and operations will be reviewed annually to ensure compliance with all applicable laws, regulations, and policies.
- Population censuses will be reviewed annually with the CDFW to ensure that harvest from hunting is not unacceptably impacting the targeted populations. The program will be modified accordingly.
- Each year the refuge staff will conduct habitat management reviews of each unit to evaluate wildlife population levels, habitat conditions and public use activities.
- Refuge specific hunting information will be available via signs, information panels, brochures and website ([www.sacramentovalleyrefuges.fws.gov](http://www.sacramentovalleyrefuges.fws.gov)).
- Federal wildlife officers will patrol, monitor, and collect data on hunting activities in the field to assure that it does not interfere with wildlife resources and other wildlife dependent uses on a weekly basis. The program will be modified accordingly.
- Dog training on the Refuge will not be allowed.
- Hunters using boats (motorized and non-motorized) must abide by the boating stipulations described in the State and Coast Guard regulations on boating.
- Harvest will be estimated using stratified sampling, self-registration, patrol and direct observations.
- Monitor hunting visits by personal contact by law enforcement officers, refuge web site email, and vehicle counters at units with parking areas.

**Justification:** Hunting is a wildlife-dependent recreational use listed in the National Wildlife Refuge System Improvement Act. Providing a quality hunting program contributes to achieving one of the Refuge goals (Goal 2, Objective 2.1, Chapter 5 of the CCP). By facilitating this use on the SRNWR, we will increase the visitors' knowledge and appreciation of fish and wildlife, which may lead to increased public stewardship of wildlife and their habitats on the Refuge and along the Sacramento River. Increased public stewardship will support and complement the Service's actions in achieving the SRNWR's purposes and the mission of the National Wildlife Refuge System. Approximately one third of the SRNWR acreage will be closed to hunting to ensure an adequate amount of high-quality feeding and resting habitat in relatively undisturbed areas (19%) and completely undisturbed areas (22%) (USFWS 2005).

CDFG (2004b) has determined that fish and wildlife resources found along the Sacramento River are healthy and robust enough to support regulated hunting and fishing, complimenting the other activities available to the public in their enjoyment of their public resources. Wildlife populations along the Sacramento River are currently hunted on both private and public lands, such as Sacramento River Wildlife Area (State). No impacts to those local populations have been documented (CDFW 2004b).

Based upon impacts described in the Hunting Plan (USFWS 2005, amended 2014), Comprehensive Conservation Plan and Environmental Assessment (USFWS 2005),

and the SRNWR Environmental Assessment Supplemental Cumulative Impacts Analysis of the Hunt Program (USFWS 2007), it is determined that hunting feral pigs within the SRNWR as described herein, will not materially interfere with or detract from the purposes for which the Refuge was established or the mission of the Refuge System. In our opinion, implementing the Hunt Plan (amended 2014) and associated stipulations will not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge.

The policy of the U.S. Fish and Wildlife Service is to engage in the necessary control of wildlife within the National Wildlife Refuge System to assure a balance of wildlife and fish populations consistent with the optimum management of refuge habitat (Refuge Manual 7RM 14.2).

Title 50 CFR Part 30, Section 11 - Control of feral animals.

(a) Feral animals, including horses, burros, cattle, swine, sheep, goats, reindeer, dogs, and cats, without ownership that have reverted to the wild from a domestic state may be taken by authorized federal or state personnel or by private persons operating under permit in accordance with applicable provisions of federal or state law or regulations.

Title 50 CFR Part 31, Section 14 - Official animal control operations.

(a) Animal species which are surplus or detrimental to the management program of a wildlife refuge area may be taken in accordance with federal and state laws and regulations by federal or state personnel or by permit issued to private individuals.

**Mandatory Re-Evaluation Date** (April 2019):

  X   Mandatory 15-year Re-Evaluation, Date will be provided in Final EA/CCP (for priority public uses)

       Mandatory 10-year Re-Evaluation (for all uses other than priority public uses)

**NEPA Compliance for Refuge Use Decision** (check one below):

- ☐ Categorical Exclusion without Environmental Action Statement
- ☒ Categorical Exclusion and Environmental Action Statement
- ☐ Environmental Assessment and Finding of No Significant Impact
- ☐ Environmental Impact Statement and Record of Decision

**Refuge Determination**

Prepared by: \_\_\_\_\_  
(Signature) (Date)

Wildlife Refuge Manager/  
Project Leader  
Approval: \_\_\_\_\_  
(Signature) (Date)

**Concurrence**

Refuge Supervisor: \_\_\_\_\_  
(Signature) (Date)

Assistant Regional  
Director, Refuges: \_\_\_\_\_  
(Signature) (Date)

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